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# THESIS

**NAVAL DOCTRINE: AN ANALYSIS OF THE EFFECTIVENESS OF NDP 1 AND NDP 6**

by

Anne Laura Westerfield
June 1996

Thesis Co-Advisors: Wayne P. Hughes
William G. Kemple

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The purpose of doctrine is to unite beliefs and actions. The Armed Forces are not always successful in achieving true interoperability; one cause for the disconnection between them is that, while the Services develop forces, they do not employ them. The Combatant commands employ what the Services provide. Accordingly, one of doctrine's most valuable roles is assuring the integration of the developer and operator. This thesis examines the successfulness of Naval and Joint Warfare and Command and Control doctrine at the interface of development and employment.

The thesis concludes that Joint Publication 1, *Joint Warfare of the US Armed Forces*, and Joint Publication 6, *Doctrine for Command, Control, Communications, and Computer (C4) Systems Support to Joint Operations*, present an integrated, focused framework. The ties to (and between) the corresponding Naval Doctrine Publications are weaker. Naval Doctrine Publication 1, *Naval Warfare*, the Naval Doctrine Command's first attempt at issuing doctrine, contains several weaknesses that detract from its stated purpose of establishing a framework for more detailed doctrine. Naval Doctrine Publication 6, *Naval Command and Control*, does meet its purpose and is a much stronger document, but could be further strengthened by incorporating a discussion of how Naval Command, Control, Communications, Computers, and Intelligence systems will be employed to support Naval Command and Control.

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# NAVAL DOCTRINE: AN ANALYSIS OF THE EFFECTIVENESS OF NDP 1 AND NDP 6

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Submitted in partial fulfillment of the
requirements for the degree of

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# ABSTRACT

The purpose of doctrine is to unite beliefs and actions. The Armed Forces are not always successful in achieving true interoperability; one cause for the disconnection between them is that, while the Services develop forces, they do not employ them. The Combatant commands employ what the Services provide. Accordingly, one of doctrine's most valuable roles is assuring the integration of the developer and operator. This thesis examines the successfulness of Naval and Joint Warfare and Command and Control doctrine at the interface of development and employment.

The thesis concludes that Joint Publication 1, *Joint Warfare of the US Armed Forces*, and Joint Publication 6, *Doctrine for Command, Control, Communications, and Computer (C4) Systems Support to Joint Operations*, present an integrated, focused framework. The ties to (and between) the corresponding Naval Doctrine Publications are weaker. Naval Doctrine Publication 1, *Naval Warfare*, the Naval Doctrine Command's first attempt at issuing doctrine, contains several weaknesses that detract from its stated purpose of establishing a framework for more detailed doctrine. Naval Doctrine Publication 6, *Naval Command and Control*, does meet its purpose and is a much stronger document, but could be further strengthened by incorporating a discussion of how Naval Command, Control, Communications, Computers, and Intelligence systems will be employed to support Naval Command and Control.

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# EXECUTIVE SUMMARY

Since 1993, the Naval Doctrine Command has been writing and issuing doctrine for the naval forces[1]. It is time to review the initial publications and assess their effectiveness. This thesis examines the successfulness of Naval and Joint Warfare and Command and Control doctrine at the interface of development and employment. Issues addressed are:

- Is the doctrine reflected in NDP 1 (*Naval Warfare*) and NDP 6 (*Naval Command and Control)* effective?
- Does NDP 1 logically flow from higher sources, such as the National Military Strategy and Joint Pub 1?
- Does NDP 6 logically flow from higher sources, such as the National Military Strategy, Joint Pub 1, Joint Pub 6, and support NDP 1?

In order to answer the questions posed above, Chapter II defines doctrine. It discusses what doctrine is, and equally importantly, what it is not. This includes some basic distinctions between doctrine, vision, principle, philosophy, and strategy. It provides a list of criteria shared by powerful doctrine and reviews four levels of doctrine. Based on the preceding discussion, standards can be distilled to measure the usefulness of doctrine. Further, because the future of warfare will certainly involve joint operations, Chapter II briefly reviews the basic doctrine of the remaining Services.

---

[1] Throughout this thesis, "naval forces" refers to both the Navy and Marine Corps, as well as the Coast Guard when operating as an arm of the Navy.

The Armed Forces are not always successful in achieving true interoperability. One cause for the disconnection between them is that, while the Services develop forces, they do not employ them. The Combatant commands employ what the Services provide. Accordingly, one of doctrine's most valuable roles is assuring the integration of the developer and operator. Doctrine is easier to define than establish. It is not tangible; it is conceptual. The complexities of establishing it are further complicated by the fact that in the U.S. Armed Forces, the Services are required by law to organize, train, and equip the forces for war, but the conduct of war is vested in the combatant commanders-in-chief (CINCs). Integration of force development and employment is not an easy task. Because of their roles and functions, the Services have a better understanding of their own capabilities and are in the best position to write doctrine on how to employ the forces they develop. At the same time, the Unified CINCs retain the corporate knowledge in warfighting and operations. Establishing Service doctrine thus requires close coordination between the Services and the CINCs to ensure that doctrine both ably reflects Service capabilities and supports the CINCs requirements. Chapter III discusses these challenges and shows how these affect establishment of doctrine.

Chapter IV analyzes current doctrine, having defined doctrine, developed standards, and discussed some of the principle challenges facing doctrine developers, it is possible to relate the challenges to current doctrine. It looks specifically at Joint Pubs 1 and 6, and NDPs 1 and 6. It also provides a brief overview of the basic doctrine publications for the Marine Corps, Army, and Air Force.

The thesis concludes that Joint Publication 1, *Joint Warfare of the US Armed Forces*, and Joint Publication 6, *Doctrine for Command, Control, Communications, and Computer (C4) Systems Support to Joint Operations*, present an integrated, focused framework. The ties to (and between) the corresponding Naval Doctrine Publications are weaker. Naval Doctrine Publication 1, *Naval Warfare*, the Naval Doctrine Command's first attempt at issuing doctrine, contains several weaknesses that detract from its stated purpose of establishing a framework for more detailed doctrine. Naval Doctrine Publication 6, *Naval Command and Control*, does meet its purpose and is a much stronger document, but could be further strengthened by incorporating a discussion of how Naval Command, Control, Communications, Computers, and Intelligence systems will be employed to support Naval Command and Control.

# I. INTRODUCTION

## A. PURPOSE

One of the purposes of doctrine is to unite beliefs and actions. However, the Armed Forces are not always successful in achieving true interoperability. One cause for the disconnection between them is that, while the Services develop forces, they do not employ them. The Combatant commands employ what the Services provide. Accordingly, one of doctrine's most valuable roles is assuring the integration of the developer and operator.

Speaking of the tactical level, Hughes says that,

> Doctrine is the companion and instrument of good leadership. It is the basis of training and all that that implies: cohesion, reliability in battle, and mutual understanding and support. (Hughes, 1986, p.24)

He goes on to point out that "Nelson understood as well as any man that *doctrine is the glue of good tactics.*" (Hughes, 1986, p.24) Despite the common perception that Nelson departed from doctrine (Royal Navy's Fighting Instructions) to become a successful commander, Nelson actually spent a great deal of time communicating with his captains about what he wanted -- and then practicing it. The reason he was so successful is that he and his captains understood each other exceptionally well; actual battle did not need extra communications.

Since 1993, the Naval Doctrine Command has been writing and issuing doctrine for the naval forces[2]. It is time to review the initial publications and assess their effectiveness.

This thesis takes the position that the purpose of doctrine is to unite beliefs and actions; good doctrine is crucial in achieving unity of effort at every level. Specifically, it examines the successfulness of Naval and Joint Warfare and Command and Control doctrine at the interface of force development and employment. Issues addressed are:

- Is the doctrine reflected in NDP 1 (*Naval Warfare*) and NDP 6 (*Naval Command and Control)* effective?
- Does NDP 1 logically flow from higher sources, such as the National Military Strategy and Joint Pub 1?
- Does NDP 6 logically flow from higher sources, such as the National Military Strategy, Joint Pub 1, and Joint Pub 6, and does it support NDP 1?

The relationship between Command, Control, Communications, Computers, and Intelligence ($C^4I$) and doctrine may not be obvious. Doctrine is a function of **command**. As defined by the Department of Defense, command is

> the authority that a commander in the Armed Forces lawfully exercises over subordinates by virtue of rank or assignment. Command includes the authority and responsibility for effectively using available resources and for planning the employment of, organizing, directing, coordinating, and controlling military forces for the accomplishment of assigned missions. (NDP 1, 1994, p. 7)

[2] Throughout this thesis, "naval forces" refers to both the Navy and Marine Corps, as well as the Coast Guard when operating as an arm of the Navy.

When a commander issues doctrine, he is meeting part of his responsibility to direct, coordinate, and control military forces under his command.

## B. SCOPE

In order to answer the questions posed above, it is necessary to define doctrine, discuss qualities that characterize powerful (good) doctrine, and develop some standards with which to analyze NDP 1 and NDP 6. Further, because the future of warfare will certainly involve joint operations, it is necessary to briefly review the basic doctrine of the remaining Services.

# II. DEFINING DOCTRINE

## A. DOCTRINE DEFINED

There is not yet a strong doctrinal culture or structure in the U.S. Navy. This is unfortunate, because doctrine is relevant to today's Navy -- as well as the other armed Services. Further, the Chairman of the Joint Chiefs of Staff has dictated that the Services will develop doctrine and it will be followed. The Navy has been slower than some of the other Armed Forces in appreciating the value of formal doctrine, although the issue was addressed at least as early as 1915. In fact, some of the attitudes of 1915 remain prevalent:

> ...we are prone to regard doctrine as being evanescent and purely academic -- a matter of interest only from a theoretical standpoint. In so doing, we eliminate from our services one of the most important elements of military command and a potent aid to victory. (Knox, 1915, p.348)

Although increasingly more individuals are beginning to acknowledge the utility of doctrine, the institutional attitude appears ambivalent. This is, in part, due to a long tradition of the U.S. Navy in operating with scarce attention to its formal (written) doctrine[3].

Doctrine means different things to different people. We need to establish a baseline, but this is difficult. The dictionary defines doctrine as

---

[3] It should be noted, however, that written doctrine has in fact existed in the form of numerous Naval Warfare Publications and TACMEMOs.

> **1** *archaic* : TEACHING, INSTRUCTION **2** **a:** something that is taught **b:** principle or position or the body of principles in a branch of knowledge or system of belief : DOGMA **c:** a principle of law established through past decisions **d:** a statement of fundamental government policy esp. in international relations. (*Merriam Webster's Collegiate Dictionary*, 1993, p. 342)

The Department of Defense echoes this, by defining doctrine as a collection of

> ...fundamental principles by which the military forces or elements thereof guide their actions in support of national objectives. It is authoritative by requiring judgment in application. (NDP 1, 1994, 50)

Yet even this is vague and open to multiple interpretations. The current Commander of the Naval Doctrine Command noted this problem and provided an informal definition. His personal working definition is that doctrine is a "dialogue of who we are, what we do, and how we do it." [4] (Bowman, 1996)

Perhaps a better way to understand doctrine is to describe what it can do, rather than define it. Hughes and Knox have both written eloquently on the topic of doctrine. The following subsections review their basic points.

## 1. What Doctrine Is

**Doctrine flows from general principles**; in the case of military doctrine, this is national strategy and higher level doctrine. Knox and others assert that doctrine should be developed top down, that is,

> The big questions of doctrine should first be settled as well as those of command, strategy, tactics, logistics and materiel. Then from such basic decisions minor doctrines may be reasoned to flow logically and consistently so that all parts of the grand scheme will be consistent and harmonious. (Knox, 1915, p. 347)

---

[4] RADM Bowman noted that even among his staff, the number of definitions of "doctrine" was directly related to the number of people in the room at the time.

This provides a foundation upon which subordinate doctrine and tactics can be structured. In addition, it allows doctrine to be fully integrated and cohesive. This is essential to ensure subordinate level doctrine supports higher level doctrine and does not contradict other doctrine at the same level. **Doctrine promotes cohesion**, the bonding of fighters in a force. Most U.S. doctrine emphasizes Structural Cohesion (that of organization and beliefs), based on shared common beliefs, equipment, and organization. Speaking as part of the Superintendent's Guest Lecture series at the Naval Postgraduate School, Major General Silvasy, former J7 for the Joint Chiefs of Staff[5], noted that cohesion is brought about by the common values shared by all American military members and history of successful joint operations. Those common values shape, and are shaped by, common doctrine.

**Doctrine unites action**, and is therefore a source of power. This is a critical purpose of doctrine, since united action gives combat power. Doctrine's power comes about through its ability to create coherence and unite activities. Equally importantly, **doctrine is what people believe in and do**. Although defined by the issuing authority, doctrine must be internalized by both the organization and its individuals. If they do not, the doctrine will have no power.

**Doctrine provides training baselines and standards** to measure against. Doctrine is reflected in teaching. **Doctrine is a standard operating procedure**, from which an innovative commander "knowingly departs to exploit an opportunity, fully confident that his fellows will act in a predictable way; indeed in the best of worlds with

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[5] J7 considers itself the "architect for the future." Included in this directorate are Joint Doctrine, Joint Military Education, Joint War Plans, and the Joint Warfighting Center.

the best of captains, even the departures seem predictable in the circumstances." (Hughes, 1986, p. 31) Doctrine incorporates an organization's beliefs and "how to's." This is particularly true at the tactical level.

## 2. What Doctrine Is Not

Doctrine is **not a vision**. Visions describe the future -- where we want to go. Doctrine deals with the present, translating the vision and principles to action and providing guidance on how to use principles to operate. This is not to say that vision is unimportant. It lays the groundwork for doctrine of the future; a commonly cited example is the development of the Marine Corps amphibious assault doctrine. It ultimately led to the development of amphibious ships and landing teams.

Neither is doctrine a timeless truth or a constant; it is not carved in stone. It can -- and must -- be changed to meet the needs of the organization it serves. Doctrine can quickly turn to rigid dogma, weakening its impact. To overcome this risk, **doctrine should be considered authoritative guidance**. This avoids rigidity and permits ingenuity.

Doctrine is not a philosophy, policy, or strategy, although they are all related. **Philosophy** is defined as "a theory underlying or regarding a sphere of activity or thought" as well as "the most general beliefs, concepts, and attitudes of an individual or group." (*Merriam Webster's Collegiate Dictionary*, 1993, p. 873) **Principles** are

fundamental assumptions; **policy** is a "high-level overall plan embracing the general goals and acceptable procedures...." (*Merriam Webster's Collegiate Dictionary*, 1993, p. 901).

Distinguishing between strategy and doctrine, Draft AFDD-1 says:

> Strategy originates in policy and addresses broad objectives and the plans for achieving them. Doctrine originates in the inherent capabilities of a particular type of military power (land, naval, air or space) and addresses how best to use that type of power, but in practice, political, economic, or social realities may dictate strategic and operational approaches that violate some aspect of doctrine....Because war is "an instrument of policy," the first rule of doctrine always is that policy governs the employment of military power. In other words, there should be a clearly established link between national security strategy, related national military strategy, theater military strategy and objectives, and the specific force capabilities necessary to support those objectives. (Draft AFDD 1, 1996, p. C-2)

## B. WHAT MAKES POWERFUL DOCTRINE?

Having discussed what doctrine is, it is important to discuss what makes doctrine useful. To be useful, it must be powerful. In *Fleet Tactics* and an article written for *Naval Proceedings* ("The Power in Doctrine"), Hughes maintains that powerful doctrine shares the following criteria.

- It is flexible, not only in application, but in meeting the changed needs of the organization over time. It can be adapted to meet new requirements.
- It allows initiative. Although doctrine is authoritative guidance, it must leave room for users to deviate from it when necessary.
- It is easily understood and accomplished.
- It is simple, clear, and concise.
- It retains control, essential to united action.

- It is compatible with other doctrine at similar levels, that is, it is part of a cohesive, comprehensive whole. It must logically flow from (and support) higher level doctrine and set the stage for lower level doctrine.
- Doctrine provides authoritative guidance, rather than being rigidly prescriptive.

## C. UTILITY OF DOCTRINE

It is not the intent of this thesis to make a case for or against current doctrine. However, a review of the need for doctrine is warranted. Good doctrine, well-practiced, leads to simpler (and shorter) orders that are more readily understood. People already understand what is expected of them. This is particularly critical within each of the Armed Forces. Outwardly stable, the forces are fraught with transfers of personnel, task forces, and individual units within and between fleets and areas of operations.

> The more unstable the force composition, the greater the need for standardized tactics and commands. Likewise, the greater the rate of turnover of tactical commanders and COs, the greater the need for personal consultation in planning and for tactical simplicity, although these cannot substitute for a unit's stability and cohesion. (Hughes, 1986, p. 273)

This problem is compounded during joint operations, when personnel from different Services bring with them their own Service's proclivities and procedures.

For effective control, it may be necessary to subdivide forces into smaller units, each with its own leader -- thus establishing a chain of command to carry out the commander's wishes. As Knox pointed out, this chain merely provides the framework for command and control. Although the commander issues instructions, these do not -- cannot -- meet every contingency (and the more contingencies they cover, the more

complicated they get). In the heat of battle, the instructions get forgotten or are overcome by events. Leaders must be able to anticipate the intent and wishes of higher authority and act of their own initiative to accomplish these. Although a commander can promulgate his intent, he cannot know everything that happens when it happens. If he tries to control all things, he may make bad decisions because information will be delayed; warfare requires immediate actions. Although C4I systems can help reduce transmission delays, they cannot write the commander's thoughts, nor can they read his thoughts at the receiving end.

While discipline can help ensure the commander's intent and instruction are followed and a good organization can ensure that they get transmitted in a timely manner, doctrine helps ensure that the spirit behind the intent is carried out. If well-exercised prior to the breakout of hostilities or crises, it develops a common bond and mutual understanding between all members of the organization while the commander and his team has time to do so.

Knox pointed out that doctrine flows from principles and offered the German and French Army doctrine (as of 1915) as examples, both based on studies of the "Napoleonic methods of conducting war, so that both flow not only from the same principles but also from the methods of one man." (Knox, 1915, pp. 334-335) Although based on the same war, the doctrines were radically different, "...due to the differences in the relative values of the several principles involved, likely to be assigned by different students, as well as to individual variations in the manner of applying the various principles to specific conditions." (Knox, 1915, p. 335)

If different values are applied to the same principles within the same fleet or army (or even nation), chaos may ensue and the results can be fatal. On the other hand, common doctrine results in harmony, with the united action essential to combat power.

## 1. Levels of Doctrine

Doctrine is layered depending on the echelon it serves, as summarized in Table 1. (Hughes, 1995, pp. 17-18)

- **National Military Strategy** is the national level. It deals with core beliefs rather than specific actions. Hughes sees its value as "promise to the troops." It is essentially Basic Doctrine, that is, it describes the heart of the organization and serves as a foundation to build upon.
- **Campaigns and Operational Art** is practiced at the CINC level. It transforms the beliefs of echelon 1 into modes of action. Its value is in careful wording, rather than in imposing demands.
- **Fleet Tactics** describes doctrine found at the task force level; it deals with a set of tactical choices. Its value is in practiced, coordinated fighting with combat arms.
- **Single Unit Tactics, Techniques and Procedures** are found at the ship, aircraft, and combat team level. It is preplanned, practiced, and exercised activity. Its value is in "spontaneous" teamwork; belief is almost irrelevant. Doctrine is most detailed and less flexible at this level.

| ECHELON | LEVEL | DOCTRINE | VALUE |
|---|---|---|---|
| 1 | National Military Strategy | Core beliefs. | Promise to the troops. |
| 2 | Campaigns and Operational Art. | Modes of action. | Careful wording. |
| 3 | Fleet Tactics | Tactical practices. | Practiced, coordinated fighting with combined arms |
| 4 | Single Unit TTP | Preplanned, practiced, exercised activity. | Spontaneous teamwork. |

**Table 1. Levels of Doctrine**

To be useful, doctrine must be balanced to meet the needs of the echelon it serves. Hughes offers three criteria to consider (Hughes, 1995, p. 18).

- Is the doctrine action or beliefs?
- Is it obligatory or guidance?
- Is it contemporary or timeless (duration)?

The answers - or emphasis - depends on which echelon the doctrine is to serve. Figure 1 shows the poles of a scale balancing level 1 and level 4 doctrine.

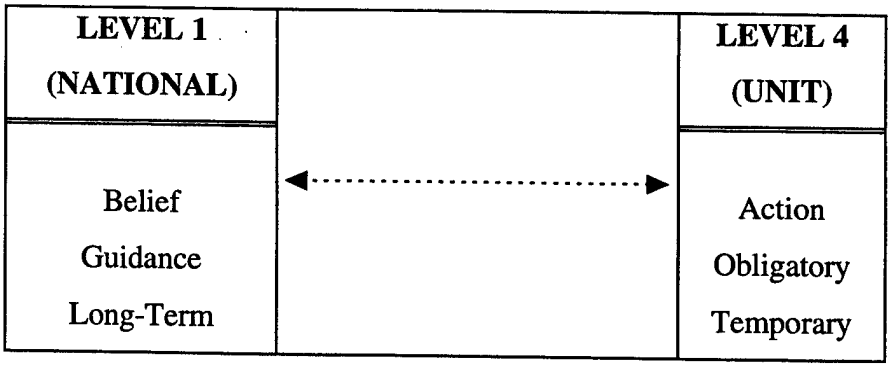


**Figure 1. Balancing Doctrine**

### 2. Standards

Based on earlier discussions, it is possible to distill some basic standards for measuring the usefulness of doctrine.

- **Compatibility**. Does the doctrine flow from higher principles? Is it compatible with other doctrine at similar levels? Does it flow logically from higher and to lower levels?
- **Commonality**. Does it unite action and promote a cohesive force? Does it offer a common perspective?
- **Beliefs**. Is it what people believe in and act on?
- **Training**. Does it provide a training baseline and standard?
- **Guidance**. Is it authoritative and firm?
- **Adaptability**. Is the doctrine adaptable to the whole range of scenarios possible at its level?
- **Initiative**. Does it allow initiative on the commander's part?
- **Control**. Does it allow the commander to retain control?
- **Appropriateness**. Is the doctrine appropriate for the level supported?
- **Language**. Is it simple, clear, and concise?
- **Ease of use**. Is it easily understood and accomplished?

These standards will be used in Chapter IV to help analyze NDP 1 and NDP 6.

## D. THE SERVICES' POSITIONS ON DOCTRINE

The Joint Staff and the Services have similar views regarding doctrine, although there are some slight differences. The basic doctrine publications are considered either

capstone documents or keystone documents. A capstone is "...a coping stone...the high point: crowning achievement." (*Merriam Webster's Collegiate Dictionary*, 1993, p. 170) A keystone is "...the wedge-shaped piece at the crown of an arch that locks the other pieces in place [or] ...something on which associated things depend for support." (*Merriam Webster's Collegiate Dictionary*, 1993, p. 641)

## 1. The Joint View

As described in Joint Pub 1, military doctrine

> Military doctrine presents fundamental principles that guide the employment of forces. Doctrine is authoritative but not directive. It provides the distilled insights and wisdom gained from our collective experience with warfare. However, doctrine cannot replace clear thinking or alter a commander's obligation to determine the proper course of action under the circumstances prevailing at the time of decision....Though neither policy nor strategy, *joint doctrine* deals with the fundamental issue of how best to employ the national military power to achieve strategic ends. (Joint Pub 1, 1991, p. 5)

The Chairman, Joint Chiefs of Staff provided the following guidance to J7 regarding joint doctrine (Silvasy, 1996); it is equally valid as a general definition of military doctrine. There are four main points. Doctrine must:

- define the way we will train and fight or operate.
- be authoritative and universally practiced -- it is sufficiently prescriptive.
- be authored by senior leadership and the best and brightest, operationally proficient action officers.
- be easily understood and taught and used by operational commanders.

To help explain the role of doctrine, J7 uses this analogy: doctrine is the playbook by which the joint team develops the game plan and practices. Commanders can call

audible signals at the line of scrimmage if necessary. The major challenge for joint doctrine is translating it into operationally sound and executable joint tactics, techniques, and procedures.

Joint Pubs 1 through 6 are considered keystone documents.

## 2. Naval Forces

Doctrine is considered authoritative guidance. NDP 1 characterizes doctrine as

> ...the starting point from which we develop solutions and options to address specific warfighting demands and challenges we face in conducting operations. Doctrine is conceptual - a shared way of thinking that is not directive. To be useful, doctrine must be known and understood. With doctrine, we gain standardization, without relinquishing freedom of judgment and the commander's need to exercise initiative in battle....Doctrine guides our actions toward well defined goals and provides the basis for mutual understanding within and among the Services and the national policy makers. (NDP 1, 1994, p. ii)

NDPs 1 through 6 are considered capstone documents, developed together by the Navy and Marine Corps, however, the Marine Corps may also develop a parallel set of doctrine. The Marine Corps view of doctrine follows.

> Doctrine is a teaching advanced as the fundamental beliefs of the Marine Corps on the subject of war, from nature and theory to its preparation and conduct. Doctrine establishes a particular way of thinking about war and a way of fighting, a philosophy for leading Marines in combat, a mandate for professionalism, and a common language. In short, it establishes the way we practice our profession. In this manner, doctrine provides the basis for harmonious actions and mutual understanding....Our doctrine does not consist of procedures to be followed in specific situations so much as it establishes general guidance that requires judgment in application. Therefore, while authoritative, doctrine is not prescriptive. (FMFM 1, 1989 p. 43)

### 3. U.S. Army

The Army has a well-established - if hard won - tradition of strong formal doctrine. It considers doctrine to be an "...authoritative statement, ...definitive enough to guide specific operations, yet...adaptable enough to address diverse and varied situations worldwide." (FM 100-5, 1993, Chapter 1)

### 4. U.S. Air Force

> Air and space doctrine has grown from the need to establish common guidelines for military action. These guidelines are particularly important under the stress of combat. (Draft AFDD 1, 1996, p. C-1)

The Air Force has identified three levels of doctrine. **Basic doctrine** is roughly analogous to Hughes' Level 1 Doctrine. It is

> ...the most fundamental and enduring beliefs which describe and guide the proper use of air and space forces in military action. Basic doctrine is the foundation of all air and space doctrine. Because of its fundamental and enduring character, basic doctrine provides broad and continuing guidance on how Air Force forces are prepared and employed. (Draft AFDD 1, 1996, p. C-1)

**Operational doctrine** is similar to Hughes' Level 2/3. It "...applies the principles of basic doctrine to military actions by describing the proper use of air and space forces in the context of distinct objectives, force capabilities, broad mission areas, and operational environments." (Draft AFDD 1, 1996, p. C-1) It, along with basic doctrine, establishes the framework for **tactical doctrine** which "...considers particular tactical objectives (blockading a harbor with aerial mines) and tactical conditions (threats, weather, and

terrain) and describes how a specific weapon system is employed to accomplish the tactical objective (B-1s laying mines at low altitude)." (Draft AFDD-1, 1996, pp. C-1-C-2) This can be regarded as Hughes' Level 3/4.

# III. CHALLENGES IN ESTABLISHING DOCTRINE

As challenging as doctrine is to define, it is still easier to define than to establish. It is not tangible; it is conceptual. The complexities of establishing it are further complicated by the fact that in the U.S. Armed Forces, the Services are required by law to organize, train, and equip the forces for war, but the conduct of war is vested in the combatant commanders-in-chief (CINCs). The Services develop the forces; the CINCs employ them. Because most U.S. operations are joint operations, it is important to recognize the challenges presented by the division of force development and employment.

## A. DEVELOPMENT AND EMPLOYMENT OF FORCES

In order to ensure compatibility between Service doctrine, and between Service doctrine and joint doctrine, developers must take into account the differences between roles, missions, and functions.

- **Roles** derive from the National Security Act of 1947 and Title 10 USC. They are the core warfare function of each Service (air, land, sea).
- **Missions** derive from the Department of Defense Reorganization Act of 1958. The combatant commanders (CINCs) are specifically tasked with the "job of carrying out broad operational missions" and the Services "become in effect force providers for CINCs." (Kuehl and Miller, 1994, p. 103) The CINCs employ the forces developed by the Services.

- **Functions** are based on Executive Order No. 9877 (26 July 1947), "Functions of the Armed Forces," and have a legal basis in DOD Directive 5100.1. This includes the activities the Services are responsible for: developing the force through organizing, training, and equipping. The Key West Agreement of 1948 further clarified the roles laid out in the National Security Act, as well as better defining the specific Service functions addressed in the Executive Order. It also distinguished between primary and collateral functions. Functions often overlap between Services.

This presents some unique challenges to developers of doctrine. Congress assigns roles and missions, the Executive Branch assigns functions. The CINCs employ the forces to carry out the CINCs' assigned missions. This creates a difficult interface, as commanders are faced with two different chains of command: an administrative chain through a military department (**functions**) and an operational chain through the combatant commanders to the National Command Authority (**missions**).

> To recapitulate: services develop forces but do not employ them, while combatant commands, under joint doctrine, employ forces but do not develop them. To make matters worse, the services then overlay this process with their unique doctrine, and when services allude to missions they are almost always referring to their doctrinal missions, not to those of combatant commands. (Kuehl and Miller, 1994, p. 104)

Another issue is that while the 1947 National Security Act addressed core warfare areas (air, land, sea), the world has changed. The way in which the Armed Forces respond to hostilities and crises have changed radically. Joint and multi-national/coalition operations have become standard and there are new types of warfare which might require "a radical change in the way we think about service roles and

missions..." (Kuehl and Miller, 104) These include space, electromagnetic spectrum, cyberspace-information warfare, and peace operations. Some have speculated that coming to grips with these arenas will be more disruptive than conventional debates about the overlap in functions. "A service with vision - and that is both intellectually and organizationally ready to grasp 'God's coattail' (as Otto von Bismarck quipped) - will be the best placed to be militarily dominant when the future is *now*." (Kuehl and Miller, 104)

A word about the development of joint doctrine. There are several sources of authority for the Joint Chiefs of Staff to establish joint doctrine. Title 10 specifies that the Chairman is responsible for "...developing doctrine for the joint employment of the armed forces." (10 USC 153.A. (5)) This is further reflected in DOD Directive 5100.1. Finally, the Goldwater-Nichols Act of 1986 authorizes the Secretary of Defense to give the Chairman responsibility of overseeing the activities of the combatant commands.

## B. INTERFACES

> Success in joint warfare depends on mutual understanding and cooperation. Coherent joint doctrine is the catalyst for this essential cooperation between Services. Our naval doctrine must fully support and be a logical extension of joint doctrine. (NDP 1, 1994, p.25)

Interfacing is not an easy task. Because of their roles and functions, the Services have a better understanding of their own capabilities and are in the best position to write doctrine on how to employ the forces they develop. At the same time, the Unified CINCs retain the corporate knowledge in warfighting and operations. Establishing Service doctrine thus requires close coordination between the Services and the CINCs to ensure that doctrine both ably reflects Service capabilities and supports the CINCs requirements. The Naval Doctrine Command recognizes the challenges presented by the

need to coordinate doctrine between the CINCs. The development of the Navy Expeditionary Force/Integrated Battle Organization is a good example.[6] Despite the fact that the Integrated Battle Organization had been wargamed twice prior to being presented, senior naval leadership was unhappy for two reasons:

- they were not a direct part of the development of the concept.
- they did not feel they had been adequately briefed on the concept during its development, even though their staffs were aware of the changes. This may have been because they (the leaders) were focused more on real-world events rather than conceptual changes.

Similarly, while CJCS is charged with developing doctrine for joint employment of forces, the CINCs have the expertise. The instability noted in Chapter II is present not only during joint operations, but on the staffs of the unified commands. Personnel from all Services must realign their thinking from their particular Service to the joint command, a difficult prospect. Control implies ownership, and unless care is taken, people often start protecting and defending own Service points of view rather than blending and uniting joint forces. There is a tendency even among CINC staffs to think in terms of own Service, not the CINC's joint forces. Often, true "joint-think" does not occur until the CINC-level. Although joint military education can help overcome this, integrated doctrine is needed to help stabilize these forces.

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[6] The following discussion is based on a briefing presented by the Naval Doctrine Command's Director of Strategy and Concept Division on 2 February 1996 at the Naval Postgraduate School.

Writing in 1951, Admiral Carney (then CINCSOUTH) addressed the challenges presented by joint operations. His point remains valid today.

> Working within the framework of one's own Service is a simple matter because the Service procedures have been long established and all of one's colleagues speak the same language and are guided by the same indoctrination. Joint efforts, be they on the staff or in the field, invariably require mutual adjustments; these adjustments may be radical but with people of good will and good spirit the Services can truly work as a team. (AFSC Pub 1, 1993, p. 2-43)

Integrated doctrine is the tool that guides the team.

# IV. ANALYSIS OF CURRENT DOCTRINE

Having defined doctrine, developed standards, and discussed some of the principal challenges facing doctrine developers, it is possible to relate the challenges to current doctrine. The Naval Doctrine Command began issuing Naval Doctrine Publications (NDPs) in 1993. The basic publications (NDP 1 through NDP 6) are considered capstone documents, intended to "...articulate naval doctrine and provide the basis for the development of tactics, techniques, and procedures." (NDP 6, 1995, Foreword) All are intended to bridge the gap between the vision of *From the Sea* and the actions of the warfighter. The NDP series apply to all naval forces, that is, both the Navy and Marine Corps, as well as the U.S. Coast Guard when under the operational control of the Navy.

Specific questions to be explored are:

- Is the doctrine reflected in NDP 1 (*Naval Warfare*) and NDP 6 (*Naval Command and Control)* effective?
- Does NDP 1 logically flow from higher sources, such as the National Military Strategy and Joint Pub 1?
- Does NDP 6 logically flow from higher sources, such as the National Military Strategy, Joint Pub 1, Joint Pub 6, and support NDP 1?

As discussed in Chapter II, one can distill the following standards for analyzing doctrine.

- **Compatibility**. Does it flow from higher principles? Is it compatible with other doctrine at similar levels? Does it flow logically from higher and to lower levels?
- **Commonality**. Does it unite action and promote a cohesive force? Does it offer a common perspective?
- **Beliefs**. Is it what people believe in and act on?
- **Training**. Does it provide a training baseline and standard?
- **Guidance**. Is it authoritative and firm?
- **Adaptability**. Is the doctrine adaptable to the whole range of scenarios possible at its level?
- **Initiative**. Does it allow initiative on the commander's part?
- **Control**. Does it allow the commander to retain control?
- **Appropriateness**. Does it know who the target audience is? Is it appropriate for this level?
- **Language**. Is it simple, clear, and concise?
- **Ease of use**. Is it easily understood and accomplished?

## A. JOINT DOCTRINE

Joint Pubs 1 and 6 are part of six keystone publications. Written by the Joint Warfighting Center, these publications are available through the World Wide Web (the Joint Electronic Library), on CD-ROM, in a boxed set, and individually. The distribution

list for Joint Pub 1 is particularly noteworthy -- a copy is intended for each E-9 and each O-4 and above. Clearly, the Chairman intends for all Service members to become familiar with the joint publications, and Joint Pub 1 in particular.

## 1. Joint Publication 1, Joint Warfare of the U.S. Armed Forces (Joint Pub 1)

The purpose of Joint Pub 1 is to "...guide the joint action of the Armed Forces of the United States, presenting concepts molding those Armed Forces into the most effective joint fighting force." (Joint Pub 1, 1993, p. iii) It does so very well.

### *a. Strengths*

Joint Pub 1 is well crafted, a solid piece of basic doctrine. The basic tenet of Joint Pub 1, "Joint Warfare is Team Warfare," is reinforced throughout the document. Since future operations (running the gamut from humanitarian relief to war) will most likely involve both joint and multi-national/coalition teams, the U.S. Armed Forces must fight as a team and must institutionalize teamwork. It traces principles and fundamentals back to their sources (the Constitution, the National Military Strategy, and other joint doctrine publications). In so doing, it **supports the higher principles** guiding the Armed Forces and establishes a framework for subsequent doctrine. Joint Pub 1 clearly outlines core **beliefs** of the Armed Forces, both for individuals, units, and organizations. This is particularly true in Chapter I ("American Military Power) and Chapter II ("Values in Joint Warfare"). These chapters discuss the purpose of the U.S. Armed Forces, the nature of warfare, doctrine, and joint values[7].

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[7] Integrity, competence, physical and moral courage, and teamwork (Joint Pub 1, 1991, pp. 7-14).

By discussing these principles and beliefs, common throughout the Armed Forces, Joint Pub 1 helps **promote a cohesive force** and **unite** joint teams. Joint Pub 1 also acts as a companion to the basic doctrine publications of individual Services. When read together, they demonstrate the integration of the Service into the joint arena.

Clearly intended for all members of the Armed Forces, the **language** is articulate and concise, precisely expressed yet easily understood by both senior officers and junior enlisted. The issues discussed are **easy to understand**, supported by numerous examples of joint operations through American history. The Afterword is particularly effective in illustrating the main points by showing how they were applied during Operation DESERT SHIELD/DESERT STORM. The doctrine found in Joint Pub 1 is also relatively **easy to accomplish** in that it sets no impossible tasks and discusses principles that have long been incorporated into the military psyche. As an example, Joint Pub 1 notes that,

> Defense of the national security rests first on the concept of **deterrence**....If deterrence fails, then our single objective is **winning the nation's wars**. When we fight, we fight to win. (Joint Pub 1, 1991, p. 1)

At the same time, however, it is important to realize that the actual process of carrying out the doctrine can be complex (consider, for example, fostering and maintaining unity of effort, a principle of war as applied to joint warfare).

Joint Pub 1 clearly states that doctrine is **authoritative**, not directive (Joint Pub 1, p. 5) and recognizes that on each occasion, the commander must base decisions on the current circumstances. **Initiative** is encouraged throughout the publication (indeed,

initiative is noted as a principle of war). Because this is basic doctrine, it is **adaptable** enough to support the entire range of military operations.

This publication establishes a **training baseline** across a wide range: as a basic introduction for recruits, to encourage junior personnel to start thinking beyond their immediate unit, and as an introduction to basic warfare principles. Further, it can be used to help educate the general public on what the Armed Forces are about.

***b. Drawbacks***

A drawback to Joint Pub 1 is that it does not discuss the elements that make each Service unique. In order to be integrated, team members must be aware of these differences. Joint Pub 1 is a logical place to present a broad overview of the Services' missions. A second drawback is that although the examples and graphics enhance the doctrine under discussion, they are ill-placed in the publication and disrupt the train of thought. Chapter IV ("The Joint Campaign") contains an overview of Operation OVERLORD which illustrates this problem. It discusses the unity of effort (and command), synergy, and synchronization of all forces that led to Allied successes at Normandy, in contrast to the "...fragmented German command structure." (Joint Pub 1, p.50) A full page map clearly illustrates the joint campaign; several pictures showing General Eisenhower with members of air, sea, and ground units reinforce the joint team concept. Unfortunately, this overview takes up five pages in the middle of the chapter, disrupting the flow between the characteristics of the Joint Campaign and Supporting Capabilities. Extended examples might be better placed at the end of the chapter. A

much better placed example is the Afterword, which uses Operation DESERT SHIELD/DESERT STORM to illustrate virtually all the principles discussed.

### 2. Joint Pub 6, *Doctrine for Command, Control, Communications, and Computer (C4) Systems Support to Joint Operations* (Joint Pub 6)

Joint Pub 6 establishes doctrine for command, control, communications, and computer ($C^4$) systems for joint operations and introduces responsibilities of the Services, agencies, and combatant commands. It outlines configuration and employment of these systems, as well.

#### *a. Strengths*

Joint Pub 6 **echoes Joint Pub 1's central theme** ("Joint Warfare is Team Warfare") in its emphasis on interoperable systems that meet the warfighter's demand when needed. As with Joint Pub 1, the doctrine and principles in Joint Pub 6 can be traced back to **higher principles**, including the basic Roles and Missions statements, the National Military Strategy, and the vision and architecture outlined in *$C^4I$ for the Warrior*. Because the concepts in *$C^4I$ for the Warrior* are also reflected in the comparable Service statements (i.e., *Copernicus* (Navy), *Enterprise* (Army), and *Horizon* (Air Force)), there is a natural flow to the Service doctrine. Clearly, Joint Pub 6 contains doctrine both **believed and acted upon**. Joint Pub 6 further promotes **unity of action** by outlining system $C^4$ objectives and principles for joint and multi-national operations, defining the basic components of $C^4$ systems, and describing the communications organization of each of the Armed Forces (including the U.S. Coast Guard) and other DOD $C^4$ agencies.

Because it is so specific regarding functions and principles of $C^4$ systems, Joint Pub 6 provides a **baseline and standard** for what systems should be. The publication can also be used for **training** on basic $C^4$ principles, and used as an introduction to how the other Services provide communications support (Marine Corps write-up is particularly good, covering all $C^4I$ areas).

Although the tone of Joint Pub 6 is more direct and firm than that of Joint Pub 1, it remains **authoritative guidance**. While specifying mandatory $C^4$ system capabilities and $C^4$ principles that systems must meet, it also recognizes that there are unique circumstances which may demand trade-offs. The doctrine in Joint Pub 6 is expected to be followed except when the commander judges that "...exceptional circumstances dictate otherwise." (Joint Pub 6, 1995, p. i) Because interoperable systems are so critical to successful operations, there is less room for **adaptability** in the doctrine (although **flexible** is one of the $C^4$ principles). In fact, Joint Pub 6 specifies that systems must be designed to support warfare scenarios, yet recognizes that systems must meet a wide range of operations in a changing environment.

Written for both commanders and $C^4$ professionals, Joint Pub 6 is equally **appropriate** for use by the Services, combatant commands, and DoD activities. Although possible to achieve, the doctrine will clearly be difficult to accomplish -- not through a fault of the doctrine, but because of the complexities of $C^4$ technology and the rapid changes it is undergoing. Joint Pub 6 has the tone and feel of a Directive or Instruction. However, it is straightforward, and **easy to understand** with graphics,

photographs, and quotes to further illustrate the issues discussed. In addition, the Executive Summary provides a solid encapsulation of the critical points made by Joint Pub 6.

### *b. Drawbacks*

Interestingly, although Joint Pub 6 discusses the employment of $C^4$ systems and their role in supporting command and control, it does not fully discuss command and control. An assumption is made that the reader understands these. Unfortunately, this is not always a valid assumption, particularly for junior $C^4$ professionals. The next edition of Joint Pub 6 could be strengthened by including a brief overview of **command**, **control**, and **command and control**.

A minor drawback concerns the discussion of Service communications organizations and structures. It appears to have been edited from five separate inputs (the discussion includes the U.S. Coast Guard); the discussion is disjointed. The next edition of Joint Pub 6 could be strengthened by standardizing among the Services and integrating the discussion. The Marine Corps section is particularly effective, all inclusive, and could be used as a model section.

## B. NAVAL DOCTRINE

Naval Doctrine Publications are considered capstone documents, applicable to the Navy and Marine Corps both, as well as the Coast Guard when operating as an arm of the Navy. Both NDP 1 and NDP 6 require that all naval professionals understand them.

## 1. Naval Doctrine Publication 1, *Naval Warfare,* (NDP 1)

The first of the NDP series to be published, NDP 1 is intended to "...provide a framework for detailed Navy and Marine Corps doctrine." (NDP 1, 1994, p. ii) Specifically, it provides a general introduction to the principles of naval warfare, the missions of naval forces, the capabilities they possess, and how these are accomplished.

As the first Naval Doctrine Publication, NDP 1 represents a valiant effort to create a common doctrinal basis for the naval forces. Many of the fundamentals discussed in NDP 1 can be traced back to **higher principles**, such as the National Military Strategy, *From the Sea*, Title 10, and DOD Directive 5100.1. Like Joint Pub 1 and other Services' basic doctrine publications, it attempts to establish the core **beliefs** and values[8] of the naval forces, as well as describe those characteristics which are unique to the naval forces. NDP 1 emphasizes naval teamwork and the Navy-Marine Corps team throughout.

Because it is basic doctrine, NDP 1 is **adaptable** to the wide range of operations the naval forces are involved in. In that **initiative** is a stated desire of naval doctrine, NDP 1 encourages and allows initiative.

NDP 1 could serve as a **training** resource, particularly the discussions on doctrine and power projection, and to a lesser extent, principles of war, maneuver warfare, and employment of naval forces. It is important to note, though, that NDP 1 merely provides an overview of these issues. It does not intend to achieve the depth of knowledge gained through professional military education, but serves admirably as a guide for further study.

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[8] When NDP 1 was issued in 1994, the Navy and Marine Corps had different core values; consequently, NDP 1 reflects the core values of Joint Pub 1. Since then, the Navy has adopted the Marine Corps values of honor, courage, and commitment.

Except for Chapter One, NDP 1 is written in straightforward **language** at a basic level. Chapter One, however, tends to ramble. The examples and photos support the text, although very few of them reflect littoral warfare.

NDP 1 had to be staffed through both the Marine Corps and Navy organizations. In so doing, it probably weakened what might otherwise have been strong points. Each of the naval forces has unique qualities, which are not discussed in NDP 1. Consequently, NDP 1 falters by seeking the middle ground.

NDP 1 contains two major flaws that weaken its intent and the doctrine it contains: the authors appear to have had a **difficult time determining the target audience**, and so the tone of the **publication is weak and rambling**. Because of this, some of the critical issues regarding doctrine suffer. The foreword requires that all "naval professionals" understand NDP 1, yet this begs the question: who is considered a naval professional? What about the many junior people who may not consider themselves naval professionals yet have a vested interest in the publications?

NDP 1 attempts to provide a common point of view for naval forces. It discusses the need for and genesis of U.S. naval forces and the character of those forces, as well as their employment, the naval forces' position on doctrine, and naval principles of war. These are essential to basic doctrine and helps to provide a focus for naval forces.

Although NDP 1 contains **beliefs** and core values of the naval forces, they are difficult to discern. It would be more effective to boldly highlight them, rather than submerge them in the text with a discussion. This is particularly true of Chapter One, which would be an ideal place to discourse on shared core values.

Although it does discuss the items promised in its purpose, NDP 1 contains little doctrine[9] and does not fully live up to its promise to provide a framework. The following discussion explains why.

NDP 1 has been described as both a capstone a cornerstone of Naval Doctrine. Unfortunately, these are opposing terms and symbolic of some of the difficulties with both naval doctrine in general, and NDP 1 in particular. A capstone is a "crowning achievement;" a cornerstone is a "basic element" (*Merriam Webster's Collegiate Dictionary*, 1993, pp. 170, 258) A capstone cannot be set in place until the rest of the structure is in place. A cornerstone is one of the first stones laid. In much the same manner, NDP 1 (indeed, the entire series) cannot truly cap a system with elements (subordinate doctrine, Naval Warfare Publications, etc.) that change to meet the evolving needs of the organization being supported. Instead, NDP 1 might best serve as a foundation -- a cornerstone -- from which to build the remaining publications in the series.

In summary, NDP 1 does not fully meet its intent to "...provide a framework for detailed Navy and Marine Corps doctrine." (NDP 1, 1994, p. ii) The following weaknesses need to be overcome for it to be an effective document:

- there is very little doctrine is contained in NDP 1.
- it does not settle on a specific target audience or purpose, and thus misses all of them.

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[9] According to one former Naval Doctrine Staff member, Dr. J.J. Tritten, NDP 1 makes substantive doctrinal statements about three subjects: maneuver warfare, offensive, and task organized operations. In addition, NDP 1 notes the core contemporary mission of power projection and establishes the operational level of war, perhaps for the first time in Navy doctrine.

- NDP 1 does not seem to flow from and interface with Joint Pub 1 -- it tends to stand alone, rather than expound on how the Navy incorporates the doctrine addressed in Joint Pub 1. This may be due, in part, to the fact that Joint Pub 1 is intended for joint warfare and CJCS has stated there is no intent to interfere with Service core skills (which NDP 1 hopes to help guide). Still, this seems an insufficient justification for the lack of strong ties to Joint Pub 1.
- NDP 1 needs to include more recent examples of the principles being illustrated, particularly as the National Military Strategy has changed dramatically over the past five years.
- it is hard to discern the framework established by NDP 1. As a result, the other doctrine publications currently published (and being drafted) are not fully integrated with NDP 1.

Specific recommendations for strengthening NDP 1 are found in Chapter V.

### 2. Naval Doctrine Publication 6, *Naval Command and Control* (NDP 6)

NDP 6 "...discusses the philosophical foundation of command and control, how commanders monitor and influence operations, the command and control process, the systems through which command and control is executed, and the various ways in which commanders establish effective command and control." (NDP 6, 1995, p. ii) It does not refer to any other aspect of $C^4I$. Like NDP 1, it is considered a capstone document to articulate naval doctrine.

*a. Strengths*

NDP 6 is a strong, well-crafted document. It provides a sound primer on naval command and control, as well as a brief discussion of the characteristics of naval $C^4I$ systems, and what makes effective command and control. In so doing, it reflects many of the fundamentals and principles found in **higher and same level doctrine**, such as *$C^4I$ for the Warrior*, Joint Pubs 1 and 6, and (maybe) NDP 1.

NDP 6 successfully establishes the "philosophical foundation of command and control," providing a foundation upon which naval forces can build $C^4I$ doctrine. It contains some **authoritative guidance** in identifying such things as characteristics of $C^4I$ systems and information criteria, although this is not the prime focus of the publication.

NDP 6 is a versatile document. It can be a valuable **training** resource for school house use, and as a basis for wardroom discussions. In echoing the characteristics of $C^4I$ systems and fundamentals of effective command and control, it provides **baselines** for measuring naval $C^4I$ systems. It will be particularly effective when used as a companion piece to Joint Pub 6.

It is **flexible** enough to use as a basic command and control doctrine publication throughout the Department of Defense. It can be used throughout the chain of command and adapted to meet virtually any leadership level, although the basic focus is on the combatant commander. Noting that **initiative** is at the core of naval warfare, it encourages development of initiative among subordinate commanders.

Well written, NDP 6 is **easily understood**, clearly and concisely summarizing an intricate topic. The examples provided enhance the text. The best of

these, an analogy comparing command and control to the human body's central nervous system, clearly indicates that NDP 6 is intended for leaders at all levels. As with Joint Pub 6, however, achieving effective command and control is a complicated task.

***b. Drawbacks***

Although a solid document on command and control, NDP 6 does not discuss $C^4I$, leaving that to Joint Pub 6. As a result, it addresses philosophy and theory more appropriate for Joint Publications than for Service-unique issues.

In a speech to AFCEA in 1995, the Chief of Naval Operations noted that the *Copernicus* architecture, introduced in 1990, "...is an initiative to make $C^4I$ systems responsive to the warfighter, field them quickly, capitalize on advances in technology, and shape doctrine to reflect changes." Admiral Boorda noted that the Navy had led the way in this initiative: the Joint Staff issued *$C^4I$ for the Warrior* in 1992, based on *Copernicus*; the Army followed in 1993 with its *Enterprise Strategy*; and the Air Force in 1994 with *Horizon*. NDP 6 does not appear to reflect *Copernicus*.

Specific recommendations for strengthening NDP 6 are found in Chapter V.

## C. OTHER SERVICE BASIC DOCTRINE

It is a given that naval forces will no longer act alone, but instead will be an integral part of a joint team. All the Armed Forces exist to support and defend the Constitution of the United States. To better interface with them, it is imperative for naval forces to be familiar with other Service core doctrine and understand the unique qualities of each Service. Further, it is important to be aware of any major disconnect between

Service doctrines. This section briefly reviews the basic doctrine publications of the Marine Corps (FMFM 1), Army (FM 100-5), and Air Force (Draft AFDD 1).

### 1. Fleet Marine Force Manual 1, *Warfighting* (FMFM 1)

A more coherent document than NDP 1, FMFM 1 describes Marine Corps doctrine and the Commandant's philosophy on warfare. It

> ...provides the authoritative basis for how we [the Marine Corps] fight and how we prepare to fight....[T]his book...provides broad guidance in the form of concepts and values. It requires judgment in application....This manual thus describes a philosophy for action which, in war and in peace, in the field and in the rear, dictates our approach to duty.
> (FMFM 1, Foreword)

The manual shows a clear progression from the definition of war and its nature through the theory of war to preparing for war and conducting it. Intended for all Marine officers, the publication is broad enough to be of value throughout the Armed Forces; it remains viable today, despite the fact that it was published in 1989.

### 2. Field Manual 100-5, *Operations*

Chapter One of this, the Army's most important doctrinal publication, provides good definitions -- up front -- of doctrine's role. It touches on the conditions under which the Army will operate: regional challenges, adversaries with fundamentally different belief systems, ambiguity and uncertainty; in short, anywhere in the world over the "...full range of possible operations as part of a joint and combined team." (FM 100-5, 1993)

"This keystone manual links Army roles and missions to the National Military Strategy, of which power projection is a fundamental principle....The Army recognizes that it will normally operate in combination with air, naval, and space assets to achieve

the overall strategic aim of decisive land combat. It also recognizes that operations outside the United States will usually be in conjunction with allies." (FM 100-5, 1993, Preface)

### 3. Air Force Doctrine Document 1, *Basic Doctrine (Draft)* (AFDD1)

AFDD 1 provides a solid overview of the Air Force's fundamental principles for every airman. It is equally a publication that will be valuable to personnel from other Services who are operating with the Air Force. Rather than focus on warfighting, it focuses on the basics that must be understood and internalized by all Air Force personnel in order to support and conduct the Air Force's warfighting. It lays out the characteristics of aerospace power, highlights core competencies of the Air Force, and clearly defines "war" and how the Air Force applies principles of war. AFDD 1 will be an ideal foundation document when it is published.

# V. CONCLUSIONS

## A. SUMMARY

> In the execution of good doctrine there is always tension between conformity and initiative....To a man, strong military leaders want freedom for initiative from their seniors and reliability from their juniors. Doctrine in the hands of able commanders will, at its most sublime, allow them achievement of both these things. (Hughes, 1986, p. 29)

The U. S. Navy has only recently begun to respond to the need for strong, utilitarian doctrine. Although the Naval Doctrine Command has been writing and issuing doctrine for several years, there is not yet a doctrinally attuned culture or structure in the U.S. Navy. For Naval doctrine to be effective, it must be cohesive and well-interfaced with joint doctrine. Currently, it does not appear to be so.

Although there are ties to higher-level sources such as the National Military Strategy and *From the Sea*, the ties between NDP 1 and NDP 6 appear to be weaker; they do not yet serve as an integrated overview. Both of these publications have the potential to become strong doctrinal statements for the naval forces. The following section provides some recommendations for strengthening them.

## B. RECOMMENDATIONS

### 1. NDP 1

As the first of the capstone documents, NDP 1 appears to be a place holder, issued to "get something on the streets" while more challenging doctrine publications (for example, NDP 3 *Operations*) are developed and issued. The next edition will be stronger

for the experience the Naval Doctrine Command has gained over the past three years. The following recommendations are offered to further strengthen NDP 1.

- Because formal doctrine is still a relatively new concept for the Navy, highlight the basic discussion on doctrine. Currently, it is part of Chapter Three's section on "Preparing for War." While clearly part of the preparations of war (doctrine must be well established and practiced prior to crisis for it to be effective), the topic is important enough to the naval forces that it deserves to be brought to the forefront.
- Chapter Four is mistitled. The title, "Where We are Headed - Into the 21st Century" implies a vision and brings to mind Vision 2010, yet it discusses the present and builds on *From the Sea*'s discussion of "Operational Capabilities."
- Require "all naval personnel" to become familiar with NDP 1. The term "naval professionals" is open to interpretation. Some will consider all naval personnel to be professional, while others may only consider careerists to be the professionals. The fundamentals presented in NDP 1 are applicable to all naval personnel, regardless of their category.
- Chapter One might further reinforce the discussion of what constitutes "naval forces" (currently buried as a footnote). In addition, there should be an acknowledgment of the unique capabilities and missions of the individual

naval Services (that is, what makes the Navy unique and distinct from the Marine Corps and Coast Guard). Along with this:

- strengthen the discussion of core values and core beliefs. The Navy and Marine Corps now share core values of **honor**, **courage**, **commitment**; NDP 1 should reflect these.
- consider a more even mix of photographs of naval forces. The majority of pictures support "Navy" warfare. Including additional pictures of the Marine Corps (and Coast Guard) will further reinforce the naval team.

- Clearly outline the legal foundation for the naval forces' roles, missions, and functions. These are currently addressed in NDP 1 as a footnote, but deserve more discussion, particularly as this discussion is missing from Joint Pub 1.
- Restructure NDP 1 as a "Basic Doctrine" publication to serve as the cornerstone to support the remaining doctrine publications.
- It has been four years since *From the Sea* was first published. NDP 1 needs to broaden its discussion of littoral warfare. In addition, some of the examples in NDP 1 should illustrate littoral warfare. If specific U.S. examples are not available, it might be possible to pull examples from other recent conflicts (Israeli experiences and the British experiences in the Falklands come most readily to mind).

## 2. NDP 6

NDP 6 provides an excellent foundation for Command and Control, but scarcely addresses Command, Control, Communications, Computers, and Intelligence ($C^4I$). Specific recommendations for further development follow.

- Expand Chapter Three to include a discussion on how naval forces will employ $C^4I$ systems. Joint Pub 6 can be used as a model.
- Use NDP 6 to bridge the gap between the vision of the *Copernicus* Architecture and the employment of $C^4I$ systems.

## 3. Other Recommendations

Other recommendations include the following.

- As noted earlier, some critical fundamentals are submerged in the text of both NDP 1 and NDP 6. Develop "one-liners" that reinforce the significant points, as Joint Pub 1 does ("Joint Warfare is Team Warfare" and "In all multinational endeavors, the teamwork of the US Armed Forces should set a strong example" are two examples pulled at random from Joint Pub 1).
- Recognize that building a Navy-Marine Corps team also includes capitalizing on the strengths of the individual team members. In the case of naval doctrine, this means recognizing unique Service capabilities as part of the doctrinal statement, rather than reaching for the common elements the naval services share. This is not to say that the common elements should be eliminated. At the same time, it is important to recognize the synergy resulting from these two Services working closely together. Although NDP 1 and NDP 6 refer to the

Navy-Marine Corps team, there is no discussion of the powerful impact this can have. For example, the Guadalcanal campaign is famous for the integration of land, sea, and especially naval air forces. The Navy positioned Marines at the center of gravity; the Marines protected Henderson Field, the critical node. Land and sea-based air forces collaborated to achieve battlespace dominance in the eastern Solomons[10].

- Develop a higher profile for both the Naval Doctrine Command and its products. This could be modeled after the Joint Warfighting Center's ambitious plan to market the Joint Publications. This will also help develop the doctrinally-attuned culture in the U.S. Navy. As an interim measure, this might include things such as:
    - publishing articles dealing with current and planned doctrine publications, and papers regarding related issues in a variety of periodicals.
    - establishing a homepage on the World Wide Web. By putting publications on-line, the Naval Doctrine Command could reach a wider distribution of publications and papers and help strengthen the doctrinal culture[11].

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[10] A noted earlier, Joint Pub 1 discusses synergy in Chapter IV ("The Joint Campaign) and offers Operation OVERLORD as an example. Joint Pub 1 also refers to "Joint Campaigning in the Solomons, 1942-1943," as an example of agility, a principle of Joint Warfare. (Joint Pub 1, 1991, pp. 23-29)

[11] The basic NDPs are currently available on-line through the Joint Warfighting Center's Joint Electronic Library. This is a step in the right direction.

## C. TOPICS FOR FURTHER RESEARCH

Naval doctrine is a broad area with many topics for additional research. The following lists topics related to basic doctrine. For topics related to doctrine at the tactical level, readers may wish to consult "Navy Tactics, Doctrine, and Training Requirements for Littoral Warfare," a Naval Postgraduate School thesis by LT John Wade.

- Explore how the capstone series of Naval Doctrine Publications can be integrated with subordinate level doctrine and publications. For example, Naval Telecommunications Publications should logically be part of a chain that starts with NDP 6.
- Develop new and current examples for Naval Doctrine Publications. Although the examples used support the text, for the most part they continue to reflect the Maritime Strategy, not the littoral strategy of *From the Sea*. Operation DESERT SHIELD/DESERT STORM can provide some examples. It may be necessary to look to other nations, as well. The British experience in the Falklands and the Israeli experiences in general may be starting places.
- Review Navy, Marine Corps, and Coast Guard doctrine for compatibility and disconnects, as these are the Armed Forces specifically covered by Naval Doctrine Publications.
- Explore Naval Doctrine Command's role with regards to training. One author has suggested that there is a lack of training doctrine which crosses all Navy

communities. He suggested NDP 7, *Naval Readiness Training*, which he envisioned as

> an umbrella doctrinal philosophy needs to be developed to define what we really mean by 'train like you fight.'....This Service-wide doctrine should come from the same organization that sets war-fighting doctrine, i.e., the Naval Doctrine Command. If assigned to the Chief of Naval Education and Training, warfare and training doctrine will be written in separate environments. That hardly lends itself to training like we fight....The vehicle for a training doctrine already exists within the Naval Doctrine Command. (Oliver, 1995, p. 42)

- Review FMFM 1. Although the publication remains viable today, it was published in 1989. It may need updating in light of the changes brought about by *From the Sea.*
- Review Service doctrine on $C^2$ and $C^4I$ (NDP 6's counterparts) to ensure they are compatible. It is as critical for this doctrine to be interoperable as it is for the systems.

There may be a perception in the Fleet that a tour at the Naval Doctrine Command is not particularly career enhancing[12]. In order for this command to produce the highest quality products, it must attract the best officers in the naval forces, and they must see their tour as offering a bright future.

[12] During a discussion of "Navy Tactics in Small Worlds" at the AFCEA West Conference on 24 January 1996, one panel member specifically stated his concern that sending "good people" to Naval Doctrine Command would harm, or at best stall, their careers.

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# ON-LINE RESOURCES

The following URL addresses are current as of 15 June 1996.

U.S. Army

1. Command and General Staff College:

a. Corps and Division Doctrine Directorate Library contains approved and draft doctrine; white papers; and doctrine notes.

**ht.://www-cgsc.army.mil/cgsc/cdd/cdd.htm**

b. *Military Review*

**http://www-cgsc.army.mil/cgsc/milrev/milrev.htm**

2. Training and Doctrine Command's home page provides links to TRADOC publications and other homepages.

**http://www-tradoc.army.mil**

a. TRADOC publications

**http://155.217.20.99/atdls.html**

b. FM 100-5, Operations

**http://155.217.20.55/ATDL/DOCS/fm/100-5/100-5toc.htm**

3. FORCE XXI homepage.

**http://204.7.227.67:1100/force21/f21home.html**

U.S. Navy

1. The Navy Public Affairs Library Index provides links to a variety of documents.

**http://www.navy.mil/navpalib/.www/subject.html**

Joint Warfighting Center

1. Joint Doctrine Homepage

**http://www.dtic.mil/doctrine/index.html**

The Joint Doctrine Homepage also provides links to the Joint Pubs Homepage, which links to joint and service doctrine publications, related research papers, and doctrine related sites.

**http://www.dtic.mil/doctrine/jel/jointpub.htm**

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